Calendar No. 284

102D CONGRESS *1st Session*	SENATE	REPORT 102-198

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AUTHORIZATION ACT OF 1991

Mr. HOLLINGS, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

OF THE

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

TOGETHER WITH

ADDITIONAL VIEWS

ON

S. 1405

OCTOBER 29, 1991.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE
59-010 WASHINGTON : 1991

S263-31

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ERNEST F. HOLLINGS, South Carolina, *Chairman*

DANIEL K. INOUYE, Hawaii	JOHN C. DANFORTH, Missouri
WENDELL H. FORD, Kentucky	BOB PACKWOOD, Oregon
J. JAMES EXON, Nebraska	LARRY PRESSLER, South Dakota
AL GORE, Tennessee	TED STEVENS, Alaska
JOHN D. ROCKEFELLER IV, West Virginia	ROBERT W. KASTEN, JR., Wisconsin
LLOYD BENTSEN, Texas	JOHN McCAIN, Arizona
JOHN F. KERRY, Massachusetts	CONRAD BURNS, Montana
JOHN B. BREAUX, Louisiana	SLADE GORTON, Washington
RICHARD H. BRYAN, Nevada	TRENT LOTT, Mississippi
CHARLES S. ROBB, Virginia	

KEVIN G. CURTIN, *Chief Counsel and Staff Director*
WALTER B. MCCORMICK, JR., *Minority Chief Counsel and Staff Director*

Calendar No. 284

102D CONGRESS
1st Session

SENATE

REPORT
102-198

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AUTHORIZATION ACT OF 1991

OCTOBER 29, 1991.—Ordered to be printed

Mr. HOLLINGS, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 1405]

together with

ADDITIONAL VIEWS

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1405) to authorize appropriations for certain programs and functions of the National Oceanic and Atmospheric Administration, and for other proposes, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill as amended do pass.

PURPOSE OF THE BILL

S. 1405 as reported would authorize appropriations of $1,667,882,000 for fiscal year (FY) 1992 for administrative support and certain oceanic and atmospheric programs of the National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce (DOC). Authorizations provided in the reported bill are for NOAA activities in addition to those programs reauthorized under separate statute. The reported bill also provides for: (1) modernization of the NOAA oceanographic research fleet; (2) development of a comprehensive national program to monitor marine and coastal waters; (3) authorization of an emergency fund to

ensure weather satellite coverage; (4) restrictions on weather station closures; (5) development of a joint 5-year hurricane reconnaissance program by DOC and the Department of Defense (DOD); and (6) establishment of a NOAA Foundation.

Background and Needs

NOAA was created by the President's Reorganization Plan No. 4 of 1970 to consolidate many of the Nation's civilian oceanic and atmospheric programs. NOAA's management structure consists of nine staff offices (program support) and five line offices. The line offices are: the National Ocean Service (NOS); the National Marine Fisheries Service (NMFS); the Office of Oceanic and Atmospheric Research (OAR); the National Weather Service (NWS); and the National Environmental Satellite, Data, and Information Service (NESDIS).

AGENCY BUDGET FOR FISCAL YEAR 1992

Under the administration's budget proposal for FY 1992, total funding for NOAA would be $1,590,276,000, an increase of $117,982,000 (+8 percent) over the level appropriated in FY 1991. The FY 1992 administration budget request for the NOAA programs authorized in this bill total $1,396,206,000. The administration suggests that this level is adequate to maintain essential atmospheric and oceanic programs as well as support significant increases for three of NOAA's highest priority programs: weather service modernization, climate and global change, and coastal ocean science. Following the pattern of previous years, the FY 1992 budget request would reduce funds for several congressionally supported programs. As in past years, however, the Committee has restored funding for many of these programs and again indicates its support for funding levels which enable NOAA to continue its current services as well as to meet growing requirements for addressing marine and atmospheric problems.

Program Support.—NOAA's program support activities include agencywide program administration and services, facilities construction and maintenance, marine ship services, and aircraft services. Under its facilities construction and maintenance activities, NOAA is consolidating its current 18 offices which are scattered around the Washington, DC area into the Metro Center Complex in Silver Spring, MD. The administration budget requests $156,275,000 for NOAA's program support activities. The request includes funds for continuing this office consolidation, enhancements for equipping and maintaining NOAA's reconnaissance and research aircraft, and $4,000,000 for a modest program to modernize and extend the service life of NOAA research vessels.

National Ocean Service.—NOS manages ocean and coastal resources, particularly in the 200-mile exclusive economic zone. In addition, NOS provides ocean observations, produces aeronautical and nautical charts, and performs geodetic surveys. The purpose of these activities is to promote the rational use of U.S. coastal areas and airspace. The Coastal Zone Management Program, the National Marine Sanctuaries Program, and the National Status and Trends Program are funded within NOS.

For NOS, the administration budget proposes $157,252,000, a funding level that would maintain most of the mapping, charting, observation, and assessment programs at, or slightly below, current levels. An increase of $7,000,000 is requested in this budget for the recently established Coastal Ocean Science Program. This program applies NOAA's observational, research, assessment, and modeling capabilities to key coastal ocean problems and, simultaneously, uses the agency's information management and delivery systems to assure that program results are accessible and communicated to decision makers. In FY 1992, NOAA proposes to increase its efforts in the following areas: (1) assessing toxic algal blooms which are increasing in frequency and severity in coastal waters; (2) mapping seagrass and vegetation to assist sensitive coastal management decisions; (3) improving fishery forecasts for Georges Bank and the Northern Gulf of Mexico; and (4) enhancing storm surge forecasts to improve severe weather planning and warnings for the coastal zone.

The administration budget also proposes a new Coastal America Program. The Committee supports the goal of this proposal, which is to promote interagency cooperation on coastal management issues. At the same time that the administration is proposing this initiative, however, it is recommending cuts in funding for existing programs focused on the very same problems. For instance, the President's FY 1992 request would reduce NOAA's Coastal Zone Management Program funding by 25 percent. This request came just months after last year's reauthorization of the Coastal Zone Management Act, which placed significant new responsibilities on States to control such land-use problems as nonpoint source pollution and habitat degradation. The Committee believes that Federal agencies should strive for interagency cooperation and is pleased that the administration is focusing on this concept. However, such coordination should be encouraged in existing programs. Finally, the Committee urges NOAA to carry out its ocean and coastal programs in a manner that takes full advantage of the capabilities and resources of other Federal agencies such as the Army Corps of Engineers, the Environmental Protection Agency, and the Fish and Wildlife Service.

National Marine Fisheries Service.—NMFS provides the scientific and technical expertise to manage U.S. living marine resources. NMFS is responsible for programs to protect marine mammals and endangered marine species as well as fishery conservation and management programs. The agency conducts fisheries research, collects fishery-related information, enforces Federal marine resource regulations, and carries out programs to ensure quality and safety of seafood.

For NMFS, the administration's FY 1992 budget requests $174,624,000, about 15 percent less than FY 1991 appropriation levels. Reductions proposed by the administration include elimination of Federal support for Alaska and Columbia River salmon hatcheries, and sharp cuts in funding for laboratory operations, fishery grant programs, shellfish studies, and seafood quality assurance research. At the same time, however, the administration's request supports level funding for some programs for which reductions have been proposed in previous budgets, including the cooper-

ative fisheries institutes and the Marine Fisheries Information Network (MARFIN). Also, the administration has proposed increases in a few areas, such as fishing industry data collection, computer systems, and seafood inspection. Overall, the administration's FY 1992 request for NMFS proposes $44,213,000 in decreases and $18,100,000 in increases, and would result in a net budget decrease of $26,113,000 from current funding levels.

In addition to the funding requested by the administration, a number of fishery problems have been identified for which increased resources will be needed. Fisheries in several regions such as the western Pacific and the Chesapeake Bay will require NMFS's particular attention in the upcoming year. In the eastern tropical Pacific, the killing of large numbers of dolphins by foreign tuna fleets continues to create serious environmental and foreign policy concerns.

Oceanic and Atmospheric Research.—OAR supports a number of oceanic and atmospheric research activities, including monitoring and prediction of long-term climate change, efforts to understand and forecast severe weather events, and studies of coastal and marine processes. The National Sea Grant College Program, the National Undersea Research Program, and the Climate and Global Change Program are funded within OAR.

The administration's FY 1992 program request of $186,776,000 for OAR proposes cuts of $52,168,000, primarily in marine research programs such as Sea Grant and the National Undersea Research Program. At the same time, it provides for a significant increase in the Climate and Global Change Program to $78,000,000. This program is NOAA's contribution to the U.S. Global Change Research Program. The goals of this NOAA program are: (1) to improve our understanding of ocean and atmospheric processes which affect global climate; (2) to provide reliable predictions of global climate change over periods of time ranging from seasons to a decade or more; and (3) to establish a national information service. Program activities include monitoring of greenhouse gases, climate modeling research, studies of tropical ocean and global atmosphere interactions, and data management.

National Weather Service.—NWS is responsible for providing weather and flood warnings, public forecasts, and advisories for all of the United States, its territories, and adjacent ocean areas, primarily for the protection of life and property. A nationwide network of about 300 facilities collects data, prepares State and local weather updates, and disseminates information to the public both directly and indirectly through the mass media.

For NWS, the administration budget request of $508,619,000 continues the modernization effort. Funds are included for the multisite demonstration program associated with this modernization. Of the total NWS request for FY 1992, $209,787,000 would be used to acquire new weather systems, an increase of $55,619,000 over the FY 1991 funding level. In addition, the request proposes termination of specialized weather services such as agriculture weather services. The Committee recognizes the importance of maintaining the NWS modernization schedule and supports the administration's proposal to improve our public weather warning and forecast system. However, the Committee also supports the continuation of

current services for those NWS programs that are proposed for reduction in the administration's budget request.

National Environmental Satellite, Data, and Information Service.—NESDIS manages the Nation's three civilian operational Earth-observing satellite systems and the data these systems collect. The primary mission of two of the systems is to support weather forecasting—the polar-orbiting satellite system which obtains global environmental data, and the geostationary satellite system (GOES) which provides continuous observations of the Earth's Western Hemisphere. The third is the land remote-sensing system (Landsat) which provides global information on characteristics of the Earth's surface. In addition, NESDIS maintains a national environmental data base through three centers: the National Climatic Data Center, the National Oceanographic Data Center, and the National Geophysical Data Center.

For NESDIS programs, the administration has requested $406,285,000, providing for an increase of $124,136,000 to continue procurement and operation of NOAA environmental satellite systems. Of the proposed increase, $101,810,000 is proposed for the polar-orbiting system, to cover launch costs and begin development of a new satellite series. The budget also provides an increase for the GOES satellite system, bringing the total request for this program to $148,651,000. Finally, the administration proposes a small increase for NOAA's environmental data management activities, increasing the request to $35,200,000.

AUTHORIZATION ISSUES

Fleet Modernization.—NOAA performs a broad spectrum of scientific research and monitoring tasks that require it to operate a fleet of research and survey vessels in coastal and deep ocean environments. In addition to serving its own programs, NOAA operates the principal Federal civilian ocean survey fleet, providing services to Federal and State programs. Although NOAA's duties have increased, the capabilities of its fleet have declined. Most NOAA vessels have reached the end of their 20- to 25-year life expectancy and are facing retirement. Further, the majority of NOAA ships were built within 3 years of 1965, making them likely to experience major problems simultaneously. If vessel failures were to occur, no replacement ships would be available.

The condition of the NOAA fleet already has deteriorated significantly. Only 6 of NOAA's 23 vessels have undergone partial midlife rehabilitation. Because of budget constraints, six ships have been deactivated, and midlife maintenance of the remainder of the fleet has been deferred. Budget restrictions also have prevented replacement of aging instrumentation and data processing equipment. These funding restrictions have rendered the fleet unable to carry out NOAA's current research and monitoring missions. In 1990, the Federal Oceanographic Fleet Coordination Council, an interagency group charged by the Federal Coordinating Council for Science, Engineering, and Technology with increasing overall efficiency and effectiveness of the Federal oceanographic fleet, reported that NOAA programs require approximately twice as much vessel time as they receive.

In response to these concerns, the Chief Scientist of NOAA chartered a study to examine ship requirements and identify a fleet size to meet current and future needs. In a 1988 draft of the study, NOAA proposed upgrading existing ships, replacing others, and obtaining additional ship support from other sources. A 1988 report by the Marine Board of the National Research Council also recommended increasing the size and improving the condition of the fleet, concluding that vessel chartering would be necessary if ships are not constructed to handle NOAA's increasing responsibilities. Originally slated for completion by NOAA in late 1989, the fleet modernization study was recently finalized and is being reviewed by the Office of Management and Budget and DOC. The Committee recognizes both the urgent need to begin modernizing and rebuilding the NOAA fleet and the importance of detailed and comprehensive planning to ensure that this effort is implemented effectively.

Coastal Environmental Monitoring.—In the wake of increasing concern about damage to marine habitats from oil spills and contamination from garbage and industrial activities, protection and restoration of the marine environment have become the focus of activity at the Federal, State, and local government levels. Each year, the various governments spend billions of dollars on corrective measures to improve our coastal environmental quality. More than $133,000,000 is spent annually to monitor the condition of the marine environment by Federal, State, and local agencies, public utilities, and private corporations.

Understanding that a considerable investment is made each year on corrective measures and monitoring, the Marine Board of the National Research Council appointed a committee to assess marine environmental monitoring and to determine how to improve the quality and usefulness of monitoring information. Based on a series of case studies, the committee evaluated major policy and technical limitations of, and opportunities for, marine environmental monitoring. The committee's final report, "Managing Troubled Waters: The Role of Marine Environmental Monitoring" (March 1990), calls for strengthening the role of monitoring in marine environmental management, conducting comprehensive monitoring of regional and national status and trends, improving monitoring program design, and making information products more useful.

Under existing authority in Title II of the Marine Protection, Research, and Sanctuaries Act and the National Ocean Pollution Planning Act, NOS conducts comprehensive national monitoring on the long-term effects of human activities on the marine environment. A critical component in this effort is the National Status and Trends Program which collects pollutant information at 180 marine sites around the Nation. This program also carries out intensive surveys of the pollution in areas of specific concern, such as Boston Harbor, San Francisco Bay, and Prince William Sound. The National Status and Trends Program was funded at $5,500,000 in FY 1991. Last year, the Committee reported legislation (S. 2788) to enhance NOAA's coastal monitoring capability. Action on the legislation was not completed during the 101st Congress.

Weather Service Modernization and Restructuring.—Advances in satellites, computers, radars, communications, and display offer new technologies for improving weather information and protec-

tion from weather hazards. At the same time, components of the existing NWS public warning system have become obsolete, and, in some cases, maintenance parts are no longer commercially available. For these reasons, NWS has made a substantial commitment in recent years to updating weather radars, observation systems, telecommunications, and data processing. The principal components of Weather Service modernization are: (1) the Next Generation Weather Radar (NEXRAD), a joint program with the Federal Aviation Administration (FAA) and U.S. Air Force to replace existing radars with an advanced doppler radar warning system; (2) the Automated Surface Observing System (ASOS), sponsored jointly with FAA, which will reduce time-consuming manual observations of meteorological conditions at ground level; (3) the Advance Weather Interactive Processing System (AWIPS), an information management and display system which will integrate data from satellites, ground-observing systems, and radar units for the first time, and will include the communications capability (NOAAPORT) needed to provide users with access to NOAA's environmental data; and (4) a Class VII computer for the National Meteorological Center which will improve larger scale, centrally prepared weather guidance products essential to accurate forecasting in field operations.

NOAA's share of the acquisition costs for these new systems is expected to total more than $1 billion, with about two-thirds of the total spent on the NEXRAD procurement. Limited NEXRAD production was initiated in December 1987, with delivery of the first 10 radars scheduled before the end of 1991. Early testing of the NEXRAD system indicates that it should provide enormous improvements in our ability to detect tornadoes and severe storm events. The Committee remains concerned, however, regarding contractual disagreements that have developed over the past year and urges that the administration take all appropriate steps to maintain fiscal and programmatic accountability for the NEXRAD contract.

In conjunction with modernization, the administration has proposed a major restructuring of the NWS organization. Administration officials suggest that installation of NEXRAD and automated observing systems will allow a reduction in the number of NWS offices from the current total of 273 large and small weather offices to 115 new Weather Forecast Offices, each with NEXRAD and AWIPS units. The proposal has raised concerns that the sites for the NEXRAD units are too far apart to ensure adequate radar coverage in mountainous areas. In addition, local communities have objected to the automation or closure of offices because they feel that important region-specific support functions will be lost.

As a result of these concerns, the 1988 NOAA authorization legislation (Public Law 100–685) established requirements for changing weather office operations. Under this law, the Secretary of Commerce (Secretary) cannot close, consolidate, automate, or relocate any weather office unless the Secretary has certified that the action will not result in degradation of weather services provided to the affected area. The certification must include: (1) a detailed comparison of services provided to the affected area before and after the action; (2) recent or expected improvements in service due

to modernization; and (3) evidence, based on demonstrations of modernized NWS operations, supporting the conclusion that there will be no degradation in service.

Despite the safeguards provided in Public Law 100-685, and recent administration assurances that no office would be closed before 1996, concern about the proposed closures remains great in some local communities.

Hurricane Reconnaissance.—Since the 1940s, the "Hurricane Hunters," an Air Force WC-130 squadron, have collected critical information for accurate advance warnings of hurricanes and severe storms in coastal areas. However, as a result of budget pressures, DOD has proposed to transfer the aircraft and the responsibility to NOAA. In response to the DOD proposal, the Secretary has stated to the Secretary of Defense that DOC currently does not have adequate resources to assume the hurricane reconnaissance mission. Failure to support these surveillance activities adequately could result in an increased risk to life and property, particularly if hurricane observations from NOAA's geostationary satellites are disrupted. Although DOD recently has agreed to maintain the program for the foreseeable future, concerns remain regarding the need to ensure that the reconnaissance flights continue.

GOES Weather Satellite Problems.—Since 1975, GOES satellites have produced the images which appear on news weather forecasts. Normally, two GOES satellites are flown simultaneously to provide complete U.S. coverage for daily weather forecasting and the tracking of severe storms, such as hurricanes. At present, however, only one spacecraft (GOES-7) is operating, and NOAA changes its orbital position to meet the different seasonal forecasting requirements of the western and eastern United States. The GOES-7 spacecraft will reach the end of its 5-year design life in March 1992. Through careful management, NOAA officials believe that GOES-7 is likely to remain operational through 1994. However, satellites operate in a dangerous environment, and unforeseen events, such as a solar disturbance, could cause this satellite to fail at any time.

As originally proposed by NOAA, the new series of GOES satellites (GOES-NEXT) would use a series of new instruments to produce more detailed information than currently provided by GOES-7. The GOES-NEXT contract was signed by NASA and Ford Aerospace Corporation (now Space Systems Loral) in October 1985, and assumed a June 1989 launch for the first satellite. At that time, NASA estimated the total cost of the five new satellites would be approximately $528 million. However, the latest cost estimates of the GOES-NEXT contract are over $1 billion, and the launch date for the first satellite has slipped over 4 years to February 1994—well past the design life of GOES-7. Furthermore, the GOES-NEXT performance requirements have been reduced in an effort to control schedule delays. As a result, the new satellites may not provide the expected improvements in performance over the existing satellites series, even though they may cost almost four times as much.

NASA, the technical procurement agent for NOAA, admits that most of the problems have resulted from underestimating the design complexity of the advanced instruments and capabilities of the new GOES satellite, and from a lack of experienced personnel

and management oversight of the instrument subcontractor, ITT. In contrast to the instrument difficulties, the Loral spacecraft are on schedule and within budget. Although measures have been taken to try to bring the entire procurement under control, the possibility of a "no-GOES" gap in coverage appears increasingly likely.

NOAA has prepared a contingency plan to use other data sources in the event of a gap, but NOAA acknowledges that the quality of forecasts and servere storm tracking will be impaired. NOAA also is looking at options for procuring a satellite that could serve as a "gap-filler" between NOAA's existing satellite and launch of the new series of GOES. The Europeans and Japanese have comparable satellite programs, and the manufacturer of the old GOES series, Hughes Aircraft Corporation, has some production capability. Gap-filler options could be very expensive in the near term, may not meet all weather forecasting needs, and could involve a substantial launch delay. However, given the continuing technical and developmental problems in the GOES–NEXT program, a gap-filler may be necessary to ensure minimal interruptions in satellite coverage.

The GOES situation also has raised questions about Federal procedures for acquiring civilian meteorological satellites to meet operational requirements. Procurement of these satellites is a cooperative venture between NOAA and NASA. NOAA, as the operating agency, defines the basic user requirements for the system, while NASA develops detailed specifications and procures new, experimental spacecraft, as well as the launch services. NOAA reimburses NASA for these services.

Prior to 1983, NASA was responsible for the research and development of experimental weather satellite instruments for the GOES satellites. After demonstrating their operational feasibility in space flight, these instruments became the prototypes for the development of later operational instruments for NOAA. However, in the early 1980s, a policy decision was made that required NOAA to assume the development and funding responsibility for its meteorological satellite systems.

The Committee is concerned that some of the cost and schedule problems with the current GOES I–M contract resulted from this shift in agency responsibilities. One recommendation of the 1991 report by the Advisory Committee on the Future of the U.S. Space Program (the Augustine Committee) was that NASA should reestablish research and development activities in support of environmental satellites to meet NOAA-stated requirements. While a restructuring of agency procurement roles would not address the current problems with the GOES–NEXT program, such an action may be necessary to reduce problems in the procurement of future weather satellite systems.

Land Remote-Sensing Data Archival.—Landsat spacecraft have been collecting information since 1972. A wide variety of users in both the private and government sectors use the date provided by Landsat to map, monitor, and analyze the Earth. The information has been used extensively for agriculture, forestry, geology, and military applications. The satellite's 16-day repeat frequency can be used in monitoring changing environmental conditions, while the

19-year time series of observations is important for detecting long-term trends.

For the duration of the program, the Department of the Interior (DOI) has provided archival and distribution of Landsat data at the Earth Resources Observation Systems (EROS) Data Center in Sioux Falls, SD. This DOI center also maintains archives of other Earth science data, including aerial photography and digital cartographic data, that complement land remote-sensing data from Landsat.

In 1984, Congress passed the Land Remote-Sensing Commercialization Act (Landsat Commercialization Act; 15 U.S.C. 4201 et seq.), directing the Secretary, through NOAA, to provide for the archiving of land remote-sensing data. In addition, that Act required that existing Federal Government facilities be used, to the extent practicable, in carrying out NOAA's archiving responsibility. As a result, the EROS Data Center continued to maintain the Landsat archives, but funding for Landsat-related activities was provided to DOI through the NOAA budget.

NOAA Foundation.—NOAA's mandate extends over a diverse spectrum, from predicting long-term changes in climate to assuring the safety and quality of seafood. As a consequence, overall agency responsibilities often limit programmatic commitments in any single area. In addition, NOAA resources have not always kept pace with growing requirements to monitor and assess both human-induced and natural changes in our oceans and atmosphere. One proposal for addressing such shortfalls is the creation of a nonprofit charitable foundation that would be closely associated with the agency and allow greater public and international participation, including financial support, for the types of activities and programs NOAA undertakes.

This type of organization already has been established for several other Federal agencies. For example, the Fish and Wildlife Foundation was created by Congress in 1984 to supplement and assist Federal efforts to conserve and manage living natural resources. That foundation encourages, accepts, and manages private donations to further its goals. Funds are used to create partnerships with conservation groups, public agencies, and corporations. The Fish and Wildlife Foundation now has a $17,000,000 annual budget and provides funding for 135 projects a year.

Patterned after this successful model, a NOAA Foundation has been proposed that would be administered by a board of directors with expertise in NOAA-related disciplines. This foundation would benefit both NOAA and the entire ocean and atmospheric user community, by using private donations to fund cooperative projects that bring State and Federal agencies together with private groups, including international entities. NOAA has long relied on volunteer networks, such as the century-old weather service observer program, to augment Federal data collection activities. A NOAA Foundation also would provide a mechanism for expanding and enhancing such volunteer programs as well as educational efforts.

Legislative History

Since the beginning of the 102d Congress, the full Committee and the National Ocean Policy Study have held two hearings on the

NOAA programs authorized by this legislation. On May 21, 1991, a hearing was held on the NOAA authorization for FY 1992. On June 18, 1991, a hearing was held on weather service modernization, environmental satellites, and other weather-related NOAA programs. In addition to reviewing the administration's budget priorities for NOAA in the upcoming year, the hearings focused on specific issues, including continuing weather satellite and radar procurement problems, development of a coastal environmental monitoring program, and modernization of the NOAA fleet.

S. 1405 was introduced by Senator Kerry on June 27, 1991, and was referred to the Committee. The bill is cosponsored by Senators Hollings and Stevens.

At its July 30, 1991, executive session, the Committee considered in open session an amendment in the nature of a substitute for S. 1405. The substitute incorporated provisions of a number of bills before the Committee, including S. 1369, the NOAA Foundation Establishment Act, which was introduced by Senator Kerry on June 25, 1991; S. 230, the Land Remote-Sensing Data Archiving Authorization Act of 1991, which was introduced by Senator Pressler on January 17, 1991; and S. 952, to authorize construction of a National Weather Service facility, which was introduced by Senator Bryan on April 25, 1991.

In addition, Senator Pressler offered the text of S. 98 as an amendment to the substitute. S. 98, the National Weather Service Modernization Act, was introduced by Senator Pressler on January 14, 1991, and changes the provisions of current law for closing or automating weather offices. The bill would require NWS to delay such changes in weather station operations for at least 1 year after the Secretary has completed a certification that the change would result in no degradation of services to the affected area. S. 98 also amends existing certification procedures, mandating an independent review by the National Academy of Sciences (NAS) and expanding the review criteria. During the executive session, the Committee members discussed the Pressler amendment and agreed to include it in the reported bill, with the understanding that further revisions would be made to address administration and NAS concerns. Without objection, the Committee then ordered the bill to be reported, as amended.

Summary of Major Provisions

The following chart summarizes the FY 1991 available appropriations, the administration's request for FY 1992, and the authorization levels in the reported bill. The figures presented below do not reflect NOAA programs and activities which are authorized under separate statute, such as the Marine Mammal Protection Act, the Coastal Zone Management Act, or the Magnuson Fishery Conservation and Management Act.

PROPOSED LEVELS FOR PROGRAMS AUTHORIZED IN THE BILL

[Dollars in thousands]

Line office	Fiscal year 1991 appropriated levels	Fiscal year 1992 request	Proposed fiscal year 1992 authorization
Program support	$146,009	$156,275	$209,631
NOS	86,585	102,372	128,538
NMFS	86,933	60,673	96,297
OAR	164,189	161,982	191,371
NWS	454,183	508,619	522,821
NESDIS	274,330	406,285	519,224
Total	1,212,229	1,396,206	1,667,882

The authorization levels in the reported bill are based on the administration's requested budget plus funding for NOAA programs that the Committee has supported in past years. In addition, increases above the administration request are provided as follows: $110,000,000 for an emergency weather satellite contingency fund; $46,000,000 for NOAA fleet modernization; $3,000,000 for coastal environmental monitoring; $1,000,000 for research on dolphin-safe alternative fishing methods; and $200,000 for the NOAA Foundation.

With respect to ocean programs, the reported bill establishes a comprehensive national program for environmental monitoring of marine and coastal waters. This program would consist of a nationwide monitoring network, intensive regional monitoring programs, and a national monitoring center.

The legislation contains several measures to deal with atmospheric and weather-related problems, including a prohibition on the closure of any weather service field office before 1996 and new criteria for such action after 1996, development of a joint NOAA-NASA strategic plan for procuring and operating DOC satellites, creation of a national weather research program, establishment of a 5-year hurricane reconnaissance program, and transfer of archiving authority for land remote-sensed data from DOC to DOI.

Finally, the provisions of S. 1369, the NOAA Foundation Establishment Act, are incorporated as title VI of the bill. These provisions would establish the NOAA Foundation as a nonprofit charitable organization that would encourage, accept, and manage private donations to benefit both NOAA and the entire marine and atmospheric user community.

Estimated Costs

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, September 25, 1991.

Hon. ERNEST F. HOLLINGS,
Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for S. 1405, the National Oceanic and Atmospheric Administration Authorization Act of 1991. Enactment of S. 1405 would not affect direct spending or receipts. Therefore, pay-as-you-go procedures would not apply to the bill.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

ROBERT D. REISCHAUER, *Director.*

CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

1. Bill number: S. 1405.

2. Bill title: National Oceanic and Atmospheric Administration Authorization Act of 1991.

3. Bill status: Ordered reported by the Senate Committee on Commerce, Science, and Transportation on July 30, 1991.

4. Bill purpose: S. 1405 would authorize appropriations for the National Oceanic and Atmospheric Administration (NOAA). Title I would authorize appropriations of $1.2 billion for NOAA's atmospheric and satellite programs, and would authorize funds for an emergency weather satellite contingency fund, require the Secretaries of Commerce and Defense to establish a 5-year hurricane/tropical cyclone reconnaissance program, establish a United States Weather Research program, and allow the Administrator of NOAA to construct, or acquire by lease construction, a National Weather Service (NWS) office from the University of Nevada in Reno, Nevada. Title I would also transfer archiving responsibility for land remote-sensing data from the Department of Commerce to the Department of the Interior, and prohibit the Secretary of Commerce from closing any NWS offices before January 1, 1996. Title II would authorize $158 million for NOAA's ocean and coastal programs. Title III would authorize the marine fishery programs of NOAA and would establish a number of requirements regarding fishery activities. Title IV would provide authorizations for a variety of miscellaneous programs within NOAA, including funds for modernization of NOAA's fleet. Title IV would also authorize the Secretary of Commerce to acquire property in the Newport News-Norfolk, Virginia area, and would place restrictions on the reprogramming of funds. Title V would authorize funding for a national program for coastal monitoring, and Title VI would establish a charitable and nonprofit corporation and would provide funds for providing administrative services for fiscal year 1992.

5. Estimated cost to the Federal Government:

[By fiscal year, in millions of dollars]

	1992	1993	1994	1995	1996
Authorizations:					
Title I	1,200				
Title II	158				
Title III	96				
Title IV	210				
Title V	3	7	12	15	
Title VI	(1)				
Total authorizations	1,668	7	12	15	
Estimated outlays	912	424	117	128	5

[1] Less than $500,000.

In addition to the costs detailed in the table above, there are costs associated with Section 111(a) of S. 1405. This section, which would prohibit the closure of any NWS office before January 1, 1996, would result in additional costs in fiscal year 1996. Under the current weather modernization schedule, NOAA would begin closing selected NWS offices in calendar year 1995. Section 111(a) would require NOAA to keep these offices open longer than planned; therefore, NOAA would have to pay operating expenses and personnel costs associated with these offices. The resulting additional costs, which could be several million dollars, would be reflected in NOAA's fiscal year 1996 budget request and would be authorized in bills for that year.

The costs of this bill fall within budget function 300.

Basis of estimate: CBO assumes that the full amounts authorized would be appropriated each fiscal year, as shown in the table. The outlay estimates are based on historical spending patterns for these programs. Based on information from NOAA and other affected agencies, CBO has estimated costs for sections of the bill for which there is no specified authorization level.

The $1.2 billion authorized for NOAA's atmospheric and satellite operations in Title I includes $110 million for an emergency weather satellite contingency fund. The funds would be used for activities that would ensure that geostationary environmental satellite coverage would not be lost due to delays in developing the GEOS–Next satellite system. CBO estimates that if the funds authorized for the satellite program in Section 105 were appropriated, none of the funds authorized for the contingency fund would be spent in fiscal year 1992, since the total funding for the satellite program would be sufficient to support any necessary emergency activities. CBO also estimates that the hurricane/tropical cyclone reconnaissance program established in Section 107 would result in no significant cost to the federal government. The United States Weather Service Research program would result in slight costs to the federal government in fiscal year 1992, but most of the cost for this program would occur in future fiscal years and would be subject to authorization and appropriation in those fiscal years. CBO estimates that there is no additional cost for the NWS facility in Reno, Nevada, as this site was previously authorized in other legislation and the provisions in Section 109 should not add to the cost of the site development already included in budget estimates for the fed-

eral government. The transfer of data archiving responsibility for land remote-sensing data to the Department of the Interior would result in no additional cost to the federal government.

Title IV authorizes appropriations for miscellaneous programs. CBO estimates that Section 401(b), which would authorize the Secretary of Commerce to acquire space from the Administrator of General Services in the Newport News-Norfolk, Virginia area, would not result in any significant cost for NOAA. Any cost in acquiring the space would result from the actions taken by the GSA and would be authorized separately.

6. Pay-as-you-go considerations: The Budget Enforcement Act of 1990 sets up pay-as-you-go procedures for legislation affecting direct spending or receipts through 1995. CBO estimates that S. 1405 would not affect direct spending or receipts. Therefore, the bill would not be subject to pay-as-you-go provisions.

7. Estimated cost to State and local governments: None.

8. Estimate comparison: None.

9. Previous CBO estimate: On May 16, 1991, CBO prepared a cost estimate for H.R. 2130, the National Oceanic and Atmospheric Administration Authorization Act of 1991, as ordered reported by the House Committee on Merchant Marine and Fisheries on May 2, 1991. H.R. 2130 would authorize an estimated $1.6 billion to NOAA for fiscal year 1992. On June 28, 1991, CBO prepared an estimate for H.R. 2130, the National Oceanic and Atmospheric Administration Authorization Act of 1991, as ordered reported by the House Committee on Ways and Means. The version of the bill reported by the House Committee on Ways and Means amends the version of the bill reported by the House Committee on Merchant Marine and Fisheries by deleting Section 604(d), which would expand eligibility for tax-deductible contributions to the capital construction fund described in 46 U.S.C. 1177.

On May 24, 1991, CBO prepared a cost estimate for H.R. 2011, the National Oceanic and Atmospheric Administration Authorization Act of 1991, as ordered reported by the House Committee on Science, Space, and Technology. H.R. 2011 would authorize an estimated $1.4 billion to NOAA for fiscal year 1992, which is less than the $1.7 billion authorized for fiscal year 1992 in this bill.

10. Estimate prepared by: Patricia A. Conroy.

11. Estimate approved by: C.G. Nuckols for James L. Blum, Assistant Director for Budget Analysis.

Regulatory Impact Statement

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported.

NUMBER OF PERSONS COVERED

In major part, this legislation provides an authorization of appropriations for FY 1992 to enable NOAA to continue existing programs. However, S. 1405 does call for creation of new programs to monitor marine and coastal waters, modernize the NOAA fleet, and improve national weather warning and forecast systems. These new programs would build upon current agency activities and re-

sponsibilities and should not affect significantly the number or type of individuals and businesses regulated.

ECONOMIC IMPACT

The legislation authorizes FY 1992 appropriations of $1,667,882, an increase of about 16 percent over the administration request. Those funding levels are not expected to have an inflationary impact on the economy.

PRIVACY

The Committee anticipates that S. 1405 will have no adverse impact on the personal privacy of any individual.

PAPERWORK

The reported bill calls for improved interagency cooperation in a number of areas such as satellite procurement, hurricane reconnaissance, weather research, environmental monitoring, fisheries enforcement, and Chesapeake Bay activities. Such cooperative efforts should reduce duplication of effort among Federal agencies and encourage reduction in paperwork requirements. At the same time, the reported bill would modify requirements for the Secretary in certifying to Congress that changes in the operations of a weather service office will not result in a degradation of weather services. This provision would require the certification to be based upon an independent review of these actions by NAS. Some additional paperwork by DOC and NAS may result from the changes in these requirements called for in the reported bill.

SECTION-BY-SECTION ANALYSIS

SECTION 1.—SHORT TITLE

This section cites the short title of the legislation as the "National Oceanic and Atmospheric Administration Authorization Act of 1991."

SECTION 2.—DEFINITIONS

This section defines abbreviated titles for two statutes referred to in the reported bill.

TITLE I—NOAA ATMOSPHERIC AND SATELLITE PROGRAMS

Section 101.—National Weather Service Operations and Research

This section authorizes $313,034,000 for FY 1992 for the operations and research duties of NWS. The funds authorized support public warning and forecast activities of a meteorological, hydrological, and oceanographic character, as well as the applied research underlying these activities. The FY 1992 total includes funding for activities requested by the administration, and for restorations of proposed reductions for the following: NWS management, agricultural and fruit frost warnings, fire weather services, flood warning and data buoy systems, and equipment maintenance. The Committee views these activities as essential elements of the Nation's public weather warning and forecast system.

Of the amounts authorized under this section, $3,140,000 is provided to fund the climate services and research being conducted at regional climate centers in Illinois, Louisiana, Nebraska, Nevada, New York, and South Carolina. The centers form a national network to address local, State, and regional needs for climate data and expertise. In past years, they have been the primary focus of the activities of the interagency National Climate Program Office and funded within OAR. In August 1990, at the request of the National Climate Program Policy Board, NOAA agreed to assume direct operational responsibility for the regional centers. Oversight and funding authorities are being transferred from the National Climate Program Office to NWS. For this reason, funding for the regional climate centers in S. 1405 is authorized in the NWS budget, rather than under OAR as it has been in prior legislation.

Section 102.—Public Warning and Forecast Systems

This section authorizes $209,787,000 in FY 1992 for the development, acquisition, and implementation of modern NWS public warning and forecast technologies. The FY 1992 authorization provided in subsection (a) supports funding for acquisition of the principal components of NWS modernization at levels consistent with the requirements set forth in the administration's budget submission for NOAA. Included in this authorization level are $118,167,000 for NEXRAD, $13,885,000 for ASOS, $54,503,000 for AWIPS and NOA-PORT, and $23,170,000 for the Class VII computer.

Subsection (b) provides that in procuring information processing and telecommunications services in connection with the AWIPS program, the Secretary may provide for contingent liability payment in the event that the Federal Government decides to terminate the contract before its expiration. Such contracts shall limit payments by the Federal Government to amounts provided in advance in appropriations acts.

Section 103.—Climate and Air Quality Research

This section authorizes OAR programs to assess natural and human-induced changes in climate and air quality. Subsection (a) of this section authorizes $111,801,000 for FY 1992 for such NOAA research activities, including studies of tropical ocean and global atmosphere interactions, trace gases which contribute to greenhouse warming, and global climate change.

Subsection (b) earmarks $78,000,000 of the FY 1992 authorization for continuation of NOAA efforts to monitor, assess, and predict long-term global environmental changes. NOAA's Climate and Global Change Program is coordinated with other participants in the U.S. Global Change Research Program to ensure that an integrated strategy is developed for understanding our changing planet.

Section 104.—Atmospheric Research

This section authorizes $47,399,000 for FY 1992 for the atmospheric research programs of OAR. These programs include research to develop improved predictive capabilities for atmospheric processes, as well as solar terrestrial services and research. The FY

1992 authorization includes the funding requested by the administration and restoration of reductions reflected in the administration's budget from the FY 1991 funding levels.

Section 105.—Satellite Observing Systems

This section authorizes activities related to NOAA satellite observing systems. Subsection (a) includes an authorization of $373,907,000 for FY 1992 for NESDIS to cover expenditures for spacecraft procurement, launch, and operation, as well as associated ground-station system requirements.

The authorization provided in this subsection covers the administration request for satellite programs, including GOES–NEXT, the polar-orbiting weather satellites, operation of Landsats 4 and 5, and operation of the satellite-aided search and rescue (SARSAT) program. The reported bill authorizes funding at the full administration request to provide resources to fix GOES–NEXT instruments, which have been plagued with design flaws. In addition, funds are authorized to continue operation of Landsats 4 and 5, which have lasted beyond their anticipated lifetimes. Finally, this subsection provides for $2,300,000 of the total funds authorized to be used in operating and maintaining the ground system component of the SARSAT program.

In order to ensure continuity of geostationary weather satellite coverage, subsection (b) authorizes $110,000,000 to be appropriated to the DOC for deposit in an Emergency Weather Satellite Contingency Fund (Fund). The Fund is to be used, subject to a Presidential declaration of an emergency, to deal with the threat of a GOES–7 failure. The Secretary may use the Fund for such purposes as procuring and launching a gap-filler satellite or reimbursing foreign governments for use of their remote-sensing assets.

Subsection (c) directs the Secretary and the Administrator of NASA to come to Congress within 120 days after enactment of this legislation with a new strategic plan for the development, procurement, and operation of the DOC's environmental satellite program. This joint plan would have two objectives: (1) to ensure continuous and adequate satellite coverage; and (2) to require direct Federal fiscal and administrative accountability in all aspects of the program. In preparing the plan, the Committee expects NOAA and NASA to undertake a comprehensive evaluation of each agency's capabilities and resources with respect to each phase of the DOC satellite program, and to use that evaluation as the basis for developing a management system that will ensure that the Nation's operational environmental satellite requirements are fully met.

The Committee views the poor performance of the GOES–NEXT program as an expensive and dire warning that our satellite procurement system is not working effectively. A recent report by the Government Accounting Office concluded that design complexity, inadequate government management of the program, and poor contractor performance all contributed to the current situation. The management problems highlighted by the GOES–NEXT program and the risk of repeating such costly mistakes cannot be ignored. The Committee anticipates that the strategic plan will provide an essential blueprint for putting DOC's satellite programs back on track.

Section 106.—Data and Information Systems

This section authorizes $35,317,000 for FY 1992 for the environmental data and information services of NESDIS. These NESDIS activities support development and management of national environmental data bases and the three national centers run by NOAA for climatic, oceanographic, and geophysical data. The funding levels authorized cover the administration request for this subactivity, including $5,600,000 to improve NOAA's data management infrastructure. These funds would be used to ensure the long-term preservation of data and improve its utility to the user community.

Section 107.—Hurricane Reconnaissance Program

This section establishes a program to track and predict hurricanes and severe storms. Subsection (a) requires the Secretaries of Commerce and Defense to establish a 5-year joint weather reconnaissance program with both operational and research components to improve forecast and warning activities.

Subsection (b) outlines weather reconnaissance responsibilities of the Departments of Defense and Commerce. DOD would be required to maintain, fly, and provide funding for the tropical cyclone reconnaissance aircraft (Air Force WC-130 Hurricane Hunters). This section directs that the flights continue and prohibits transfer of the planes from DOD unless all involved parties agree. DOC would be responsible for funding and carrying out data-gathering and research through remote sensing, ground sensing, and research aircraft, activities traditionally carried out by NOAA. These activities include reconnaissance flights by two WP-3 aircraft and satellite observations to provide data on storm intensity and direction. These data support the NWS Hurricane Center, which provides forecast guidance on the track and intensity of hurricanes based on numerical models.

Subsection (c) requires development of a joint 5-year management plan for implementing the weather reconnaissance program. The subsection requires DOC and DOD to submit a joint report to Congress within 120 days of enactment of this legislation that describes the organization and implementation plans for this program, as well as the funding requirements. In addition, the Secretary and the Secretary of Defense are directed to develop jointly a management plan for a long-term program that would follow the 5-year program established under this subsection and provide adequate protection for citizens in the coastal areas of the United States. This plan would be submitted to Congress within 4 years of enactment of this legislation. The required management plans and programs must provide at least the same degree and quality of hurricane tracking and protection as currently exists. In addition this subsection prohibits any reduction in the level of service (including the quantity and quality of aircraft, flying hours, crews, and support personnel) or the areas served by both the existing principal and back-up tropical cyclone reconnaissance and tracking systems.

Section 108.—United States Weather Research Program

The NAS recently reported that the United States will fail to realize full benefit from our ongoing investment in modern weather

observing systems and forecasting technologies, unless a complementary program is designed to take advantage of the research opportunities which the new equipment provides. Such a program will require effective coordination among the many Federal and nongovernmental entities currently involved in weather research and forecasting. Increased understanding of weather processes provided by a comprehensive research program could improve substantially the accuracy of weather warnings and forecasts and result in economic and social benefits to the Nation that far exceed program costs.

This section provides for the creation of a U.S. Weather Research Program. Subsection (a) requires the Secretary, in cooperation with the Committee on Earth and Environmental Sciences (CEES), to establish a program for the purposes of: increasing national benefits from weather service modernization; improving weather forecasts and warnings; addressing critical weather-related scientific issues; and coordinating the efforts of both government and non-government entities.

Subsection (b) requires the Secretary, in cooperation with CEES, to prepare and submit an implementation plan for the program to Congress within 90 days of enactment of this legislation. The plan must establish programmatic priorities which would advance most effectively the understanding and prediction of weather processes; describe specific activities required to achieve those priorities; and outline the respective roles of each Federal agency and department which could contribute to the program.

Section 109.—Weather Service Office in Reno, NV

This section authorizes NOAA to locate a weather service facility on the campus of the Desert Research Institute outside Reno, Nevada. Such a facility is needed in the Reno area to provide NWS with a forecast office, radar controls, and upper air operations. A NEXRAD unit will be located nearby, on top of a mountain east of Reno.

Subsection (a) authorizes NOAA to construct or lease a facility on Institute property without acquiring full ownership. The subsection also authorizes collocation of a regional climate center at the site. This authorization is consistent with the NAS-supported policy of encouraging the use of university campuses with atmospheric science departments as sites for NWS facilities. The goal of such a policy is to foster effective collaboration between NWS and the universities with respect to both education and research.

Subsection (b) authorizes NOAA to reimburse the Desert Research Institute for the cost of utilities and access to the site. Subsection (c) provides authority for NOAA operations at the facility.

Section 110.—Transfer of Data Archiving Responsibility

This section amends the Landsat Commercialization Act to transfer responsibility for archiving land remote-sensed data from DOC to DOI.

Subsection (a) includes several findings concerning the archiving of land remote-sensing data. This subsection emphasizes the importance of Landsat data for monitoring and assessing global land re-

sources and global change, and encourages the use of archived data for research purposes.

Subsection (b) would amend section 402(b) of the Landsat Commercialization Act to require that any person licensed to operate a system under that Act make data available for archiving to the Secretary of the Interior.

Subsection (c) would amend section 602 of the Landsat Commercialization Act to transfer authority for the archiving of land remote-sensed data from DOC to DOI. In addition, this subsection would ensure that archiving activities undertaken by DOI are consistent with the terms and conditions of any contract or agreement entered into under Title II, III, or V, or with any license issued under Title IV, of the Landsat Commercialization Act.

Section 111.—Closure, Consolidation, Automation, or Relocation of Field Offices

This section amends the provisions of current law that deal with changes in weather office operations associated with weather service modernization. Subsection (a) would prohibit the closing, consolidation, automation, or relocation of any weather office by the Secretary prior to January 1, 1996.

Subsection (b) amends Public Law 100-685 to alter existing procedures for certifying that no degradation of services would result from closing, consolidating, automating, or relocating a weather office. This subsection of the reported bill would amend section 408(b) of Public Law 100-685 to require that at least 1 year elapse from the date of such a certification before the Secretary would be authorized to close a weather office or make other specified operational changes. In addition, this subsection would mandate that the certification be based on an independent NAS review of weather services in the affected area. Finally, the subsection would expand the certification criteria under existing law to require the identification of areas within any State that: (1) would be adversely affected by the loss of manned stations; and (2) would not receive complete and total coverage at 10,000 feet by the NEXRAD doppler network.

TITLE II—NOAA OCEAN AND COASTAL PROGRAMS

Section 201.—National Ocean Service

This section authorizes $125,538,000 for the ocean mapping, observation, and assessment programs of NOS. Subsection (a) of this section includes $51,087,000 for the mapping, charting, and geodesy program. Mapping and charting activities provide accurate and timely marine, coastal, and aeronautical data in various map and chart formats. The geodesy program provides accurate geographic positions, elevations, and gravity values for national defense and space activities, public works, and land information management.

Subsection (b) includes an authorization of $57,273,000 for observation and assessment activities, which provide timely and accurate marine observations and predictions for safe and efficient operations in the oceans, coastal areas, estuaries, and Great Lakes. In addition, this subsection authorizes $4,500,000 for FY 1992 activities carried out under the National Ocean Pollution Planning Act

of 1978, and $11,000,000 for FY 1992 activities carried out under title II of the Marine Protection, Research, and Sanctuaries Act of 1972.

Within the amount authorized for observation and assessment activities, subsection (c) authorizes funds for the administration's requested increase of $7,000,000 for the recently established Coastal Ocean Science Program. The goal of the program is to apply NOAA's observational, research, assessment, and modeling capabilities to key coastal ocean problems and, simultaneously, use the agency's information management and delivery systems to assure that program findings are accessible and communicated to decision makers.

In addition, subsection (d) provides that $1,678,000 is authorized for ocean management activities.

Section 202.—Ocean and Great Lakes Research

This section authorizes $32,171,000 for the programs in Ocean and Great Lakes Research. These funds support NOAA's mission to improve the prediction and assessment of ocean, coastal, and Great Lakes processes and resources.

TITLE III—NOAA MARINE FISHERY PROGRAMS

Section 301.—Authorization of Appropriations

This section amends the National Oceanic and Atmospheric Administration Marine Fisheries Program Authorization Act (Marine Fisheries Program Act) to authorize FY 1992 appropriations for a number of NOAA's marine fisheries programs. Activities funded under this section include enhancement of salmon resources, implementation of international fishery agreements, seafood safety and product quality research, and habitat conservation efforts. This section authorizes FY 1992 funding levels of $52,843,000 for information collection and analysis, $27,869,000 for conservation and management operations, and $15,585,000 for State and industry assistance programs. The amounts authorized would fully cover the administration request and restore funding for a number of congressionally supported activities which the administration has proposed to eliminate.

Section 302.—Development of Dolphin-Safe Methods of Tuna Fishing

This section amends section 2 of the Marine Fisheries Program Act, authorizing $1,000,000 within the total amount for fisheries information collection and analysis to establish a program to develop "dolphin-safe" methods of locating and catching yellowfin tuna in the eastern tropical Pacific. As the Committee has stated in the past, the ultimate solution to the tuna-dolphin issue depends upon the development and implementation of new fishing methods that would reduce or eliminate the incidental mortality of dolphins. Amendments to the Marine Mammal Protection Act (MMPA) in 1988 required an NAS report on such alternative tuna fishing techniques. The Committee anticipates that the report will be released shortly and will form the basis for a program to develop dolphin-safe fishing technologies. Both the environmental community and

the U.S. tuna industry are pressing for initiation of such a program. In addition, an international panel recently ruled that the U.S. ban on tuna imports under the MMPA violated our foreign trade obligations. This ruling underscores the importance of developing new fishing methods that will allow the tuna fleet operating in the eastern tropical Pacific to meet the longstanding objectives of the MMPA, thus obviating the need for such a ban.

This section also directs the Secretary to work with the Inter-American Tropical Tuna Commission (IATTC) and interested industry and environmental groups to develop a program plan that provides for: (1) cooperative behavioral research on the association of dolphins and yellowfin tuna in the region; (2) development, testing, and implementation of new methods for locating and catching yellowfin tuna without the incidental taking of dolphins; and (3) appropriate measures to ensure participation and cost sharing by each foreign government that conducts, or authorizes its nationals to conduct, yellowfin tuna fishing in the region. The IATTC has provided international leadership and essential technical support for the implementation of dolphin protection programs by the foreign tuna fleets operating in the eastern Pacific. The Committee expects the Secretary to make full use of that expertise in designing the program. In addition, the Committee understands that some U.S. tuna companies have offered to provide additional resources to supplement Federal funding in this area. The Committee supports such commitments and believes that participation and involvement by interested industry and environmental groups, as well as foreign tuna harvesting nations will be critical to developing and implementing new dolphin-safe technologies.

Section 303.—Fisheries Research

This section makes a technical amendment to section 304(a) of the Magnuson Fishery Conservation and Management Act (Magnuson Act) to clarify that the Administrator is authorized to initiate and maintain a comprehensive fishery research program designed to acquire knowledge and information, including statistics, on fishery conservation and management and on the economics of fisheries.

Section 304.—Fishery Facilities

This section clarifies that aquaculture facilities are eligible for participation in the Fisheries Obligation Guarantee (FOG) program. The FOG program under the Merchant Marine Act, 1936, has provided guaranteed financing for fishermen for more than half a century. In 1980, the program was extended to shoreside facilities, and the question has now arisen as to whether this extension included aquaculture. Section 304 of the reported bill would amend section 1101(k) of the Merchant Marine Act, 1936 (46 App. U.S.C. 1271(k)), broadening the definition of the term "fishery facility" to include any building, land, equipment, or vessel used for aquaculture purposes. The change would resolve the question of whether operators and owners of aquaculture facilities are eligible for federally guaranteed loans under the FOG program.

Section 305.—Study of Joint Enforcement of Fisheries Regulations

This section requires the Secretaries of Commerce and Transportation to prepare a joint report describing methods by which Coast Guard fishery enforcement efforts in the western Pacific may be enhanced and coordinated with those of NMFS. In recent months the number of longline fishermen operating in the region has risen substantially. The Western Pacific Fishery Management Council (WESPAC) has become concerned about possible stock depletion, as well as increased reports of gear conflicts and serious injuries to endangered Hawaiian monk seals and seabirds. In response to these problems, the Secretary approved Magnuson Act regulations proposed by WESPAC to limit the activities of longline fishery in the Federal waters around the Hawaiian islands. The regulations restrict the number of longline vessels permitted to fish in this area and close certain areas to longline fishing altogether. Cooperation and planning by NMFS and the Coast Guard will be necessary to ensure that these regulations are adequately enforced.

Section 306.—Chesapeake Bay Estuarine Resources Office

This section provides for establishment of a NOAA office to coordinate and oversee the agency's Chesapeake Bay-related activities. Subsection (a) directs the NOAA Administrator to: (1) establish the Chesapeake Bay Estuarine Resources Office within NOAA; and (2) in consultation with the Chesapeake Bay Executive Council, appoint a director for the Office.

Subsection (b) sets forth the functions of the Office, which are to be performed in consultation with the Chesapeake Bay Executive Council.

Subsection (c) directs the Secretary to submit a funding request for the Office, to be included in the President's annual budget to Congress as a separate budget line item.

Subsection (d) amends section 2 of the Marine Fisheries Program Act to provide that, of sums authorized under that section, no more than $2,500,000 are authorized to be appropriated in FY 1992 to establish the Office, and that no more than 20 percent of those sums are to be used for administrative purposes.

TITLE IV—MISCELLANEOUS PROVISIONS

Section 401.—Program Support

This section authorizes $209,631,000 for program support. Subsection (a) includes $72,105,000 for administration and services. These funds are authorized to provide for overall NOAA management, including administration of the NOAA Corps, the administrative support centers, program support, automated systems, and retired pay for commissioned officers.

Subsection (b) authorizes $12,753,000 for facilities requirements. These funds are authorized to provide for repairs and maintenance on major NOAA-owned research and operational facilities, and to consolidate area employees.

Subsection (c) authorizes $63,573,000 for marine services, including operating the 23 major vessels of the NOAA fleet. This subsection also authorizes $1,500,000 for NOAA to acquire a multibeam sonar mapper and $800,000 to reactivate and operate the NOAA

vessel ALBATROSS IV, which is needed to collect fisheries data for the Northeast Atlantic region. NOAA is prohibited from deactivating any research vessel, except for safety reasons, unless an equivalent vessel is available to replace it. Further, this subsection requires all NOAA vessels, including major components of the hull or superstructure, to be built in U.S. shipyards, unless the President determines that it is in the national security interest of the United States to do otherwise and provides a notice of that determination to Congress. In addition, all NOAA vessels are to be repaired in U.S. shipyards unless they are operating on a voyage outside the waters of the United States and must make repairs in a foreign port before returning to the United States. Finally, the subsection directs the Secretary to consult with the Oceanographer of the Navy regarding appropriate measures to be taken to ensure that NOAA vessels are interoperable with those of the Oceanographer of the Navy. This provision recognizes that NOAA and the Navy have many overlapping areas of responsibility, including mapping, charting, and oceanographic research.

Subsection (d) authorizes funds necessary to modernize and repair the NOAA oceanographic fleet. A total of $50,000,000 is authorized to commence the modernization, which will include service life extensions and critical maintenance, replacement of fisheries research vessels and the design of a new oceanographic research vessel, and upgrading instruments and purchasing new equipment. In addition, the Secretary must submit to Congress, no later than October 1, 1991, a detailed fleet replacement and modernization plan. Finally, this subsection provides NOAA with multiyear contract authority to enable NOAA to enter into lease or lease-purchase arrangements with the private sector, as recommended by the studies described above. Under these provisions, multiyear contracts may be entered into only where the Secretary expects to request funding from Congress to fulfill the contract and determines that the use of such contract is in the economic interest of NOAA and the Government. In addition, such a contract may not be entered into by the Secretary until the modernization plan required under this subsection is submitted to Congress and unless the funds required to enter into the contract have been appropriated.

Subsection (e) authorizes $8,900,000 for aircraft services, including maintaining and operating 14 aircraft located throughout the United States.

Section 402.—Notice of Reprogramming

This section requires the Secretary to provide a notice to Congress at least 30 days before reprogramming funds among programs if the amount is: (1) greater than $500,000; (2) more than 10 percent of the destination program's total funding; or (3) more than 5 percent of the total funding of the program from which the amount is taken.

TITLE V—COASTAL MONITORING

Section 501.—Short Title

This section states the short title as the "Marine and Coastal Monitoring Act of 1991."

Section 502.—Purpose

This section states that the purpose of this title is to establish a comprehensive national program for the monitoring of marine and coastal waters of the United States. This program will provide data and information on the status and trends of contamination in these waters.

Section 503.—Definitions

This section defines "Administrator" and "marine and coastal."

Section 504.—Comprehensive Program

This section establishes that the comprehensive national monitoring program will consist of: (1) a national monitoring network; (2) intensive regional monitoring programs; and (3) a national monitoring center.

Section 505.—Nationwide Monitoring Network

This section sets forth requirements for a nationwide monitoring network. Subsection (a) establishes the network, which will include the activities and functions of the National Status and Trends Program that now exists at NOAA. This network will evaluate the status and trends of toxic substances, biological oxygen demand, algal blooms, and overall ecological conditions of, and in, marine and coastal waters.

Subsection (b) requires an interagency committee, chaired by the NOAA Administrator (Administrator), to direct priorities for the nationwide program.

Section 506.—Regional Monitoring Programs

This section provides for development of regional monitoring programs to assess areas of special concern. Subsection (a) requires the Administrator to designate estuarine and coastal areas of particular concern as regions in which the waters will be monitored intensively. These areas include each of the estuarine areas listed in section 320(a)(2)(B) of the Federal Water Pollution Control Act and any additional areas that the Administrator may designate.

Subsection (b) mandates that the Administrator also establish monitoring coordination groups to design and direct a long-term monitoring program for each region.

Subsection (c) requires that the regional monitoring programs incorporate fully the activities of the nationwide monitoring network.

Subsection (d) provides that each regional monitoring group also must develop an annual operating plan for the monitoring activities in its region. This plan would describe proposed monitoring activities, including identification of the responsible agency, estimated costs, and sources of available funding for each proposed activity.

Subsection (e) requires the issuance of regulations necessary to implement this section.

Section 507.—National Coastal Monitoring Center

This section mandates under subsection (a) that the Administrator establish a National Coastal Monitoring Center (Center) to develop scientific methods and procedures for carrying out monitoring activities and disseminating data and reports.

Subsection (b) sets forth the activities to be undertaken by the Center, including development of data systems and quality control programs, research to improve monitoring methods, various workshops and meetings, and reports on the status and trends of the coastal environmental quality.

Section 508.—Boston Harbor Monitoring

This section addresses monitoring activities in Boston Harbor and Cape Cod. Subsection (a) directs the Administrator to develop a multi-year environmental monitoring plan in connection with the cleanup of Boston Harbor and in conjunction with the Massachusetts Water Resources Agency. In addition, subsection (b) authorizes the Administrator to monitor, in coordination with appropriate private and public entities, the ecological impacts of the Boston Harbor cleanup on Cape Cod Bay, particularly the proposed effluent outfall.

Section 509.—Authorization of Appropriations

This section authorizes appropriations for this program of $3,000,000 for FY 1992; $7,000,000 for FY 1993; $12,000,000 for FY 1994; and $15,000,000 for FY 1995.

TITLE VI—NOAA FOUNDATION

Section 601.—Short Title

Section 601 states that this title may be referred to as the "NOAA Foundation Establishment Act".

Section 602.—Establishment and Functions

Subsection (a) establishes the NOAA Foundation (Foundation) as a nonprofit organization, which is not an agency or establishment of the U.S. Government.

Subsection (b) provides a general description of the functions of the Foundation, which are to: (1) encourage, accept, and manage private donations for the benefit of NOAA and for other authorized activities; (2) educate and involve the public in NOAA activities; (3) promote cooperation between public and private organizations in such activities; and (4) facilitate the involvement of international and other entities and individuals in projects similar or complementary to those undertaken by NOAA.

Section 603.—Board of Directors

This section establishes a Board of Directors (Board) to govern the Foundation. Subsection (a) sets forth the qualifications of the 13-member Board, and requires the Administrator to serve as a

non-voting and ex officio member. Members of the Board would not be considered employees of the U.S. Government.

Subsection (b) establishes the guidelines under which members are appointed and replaced, and requires the Secretary to appoint the members to the Board by October 1, 1991.

Subsection (c) directs the voting members of the Board to elect a Chairman every 2 years.

Subsection (d) establishes that a quorum consists of a majority (seven or more) of the voting members.

Subsection (e) requires the Chairman to call meetings of the Board at least once a year and sets forth the circumstances under which a member may be removed.

Subsection (f) prohibits members from receiving a salary for serving on the Board, but would allow reimbursement for expenses incurred in the performance of their duties.

Subsection (g) sets forth the Board's general powers of administration. First, the Board would be authorized to appoint officers and employees when the Foundation possesses sufficient funds to do so. Second, the Board would be permitted to adopt a constitution and bylaws to govern the Foundation pursuant to the purposes of this title. Third, the Board would be empowered to undertake any activities necessary to carry out the provisions of this title. Finally, this subsection describes limitations on employee salaries and requires the first appointment to be the Secretary of the Board.

Section 604.—Rights, Obligations, and Powers of the Foundation

This section outlines a number of requirements that must be met in establishing and operating the Foundation. Subsection (a) sets forth the general rights and obligations of the Foundation. The Foundation, established in perpetuity, is authorized to conduct business throughout the United States and abroad and must be headquartered in the District of Columbia. The subsection also requires the Foundation to have a designated agent to accept service of process.

Subsection (b) requires the Foundation to have an official stamp that shall be judicially noticed.

Subsection (c) describes the powers and functions of the Foundation, outside of those possessed by nonprofit corporations acting as a trustee in the District of Columbia. These include accepting gifts, purchasing property, and selling or investing property or incomes. The Foundation may be sued and is responsible for its own defense. Individual members of the Board would not be held personally liable for any action by the Foundation, except for gross negligence. Further, the Foundation is authorized to conduct business with public and private groups and to enter into contracts or other arrangements with such groups. The subsection also acknowledges the Foundation's authority to engage in joint projects with NOAA and to perform any and all acts necessary and proper to carry out the functions of the Foundation.

Section 605.—Administrative Services and Support

This section sets forth provisions concerning administrative matters. Subsection (a) authorizes the Secretary to provide the Founda-

tion with personnel, facilities, and other administrative support for up to 5 years from the date of enactment of the legislation.

Subsection (b) allows the foundation to reimburse the Secretary for services provided, including reimbursement of expenses to voting Board members.

Section 606.—Volunteer Status

This section authorizes the Secretary to accept the voluntary services of the officers or employees of the Foundation for or in aid of programs conducted by NOAA.

Section 607.—Audits, Report Requirement, and Petition of Attorney General for Equitable Relief

This section provides auditing and reporting requirements for the Foundation. Subsection (a) establishes that, for auditing and reporting purposes, the Foundation is to be treated as a private corporation established under Federal law. It amends "An Act to provide for audit of accounts of private corporations established under Federal law," 36 U.S.C. 1101 et seq., to include the Foundation within that Act's annual auditing and reporting requirements.

Subsection (b) requires that the Foundation transmit an annual report to Congress after the close of each fixed year explaining its activities and proceedings during that year.

Subsection (c) provides the Attorney General with authority to seek equitable relief if the Foundation engages in, or threatens to engage in, practices inconsistent with its purposes, or refuses, fails, or neglects to meet its obligations and responsibilities under this title.

Section 608.—Release From Liability

This section states that the U.S. Government is not responsible for any debts incurred or obligations made by the Foundation.

Section 609.—Authorization of Appropriations

This section authorizes an appropriation of $200,000 for FY 1992 to enable NOAA to provide administrative services to the Foundation.

AGENCY COMMENTS

U.S. DEPARTMENT OF COMMERCE,
OFFICE OF THE GENERAL COUNSEL,
Washington, DC, July 30, 1991.

Hon. ERNEST F. HOLLINGS,
Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: This letter expresses the Department of Commerce's strong objections to S. 98 and S. 916, bills that would restrict the Department's efforts to modernize the operations of the National Weather Service. These bills may be offered as amendments to a NOAA authorization bill when it is marked-up by your Committee. For the reasons discussed below, the Secretary of Commerce would recommend that the President veto a NOAA authori-

zation bill if amended to contain the substance of either S. 98 or S. 916.

BACKGROUND

S. 98 and S. 916 would impose additional requirements to the certification provisions of Public Law No. 100-685 concerning changes to the operations of weather service offices. Public Law No. 100-685 prohibits the Secretary of Commerce from closing or making certain other changes to weather service offices prior to certifying to various Congressional Committees that the action will not cause a degradation of weather services. The Secretary's certification must include: (1) a detailed comparison of the services provided to the affected area and the services to be provided after such action; (2) any recent or expected modernization of National Weather Service (NWS) operations which will enhance services in the affected area; and (3) evidence based upon operational demonstration of modernized NWS operations which supports the conclusion that no degradation in services will result from modernization.

The Department believes that the provisions of Public Law No. 100-685 provide all necessary and reasonable safeguards to ensure that the modernization will not cause a degradation of weather services.

DESCRIPTION OF S. 98 AND S. 916

S. 98 would require that at least one year elapse from the date of the Secretary's certification before a closing or other specified change to weather service office operations could take effect. In addition, S. 98 would require the Secretary's certification to be based upon a National Academy of Sciences' (NAS) review of weather services for the affected area.

S. 916 would expand the certification provision, but in a different fashion. S. 916 would require the Secretary to certify that the affected area will receive complete and total coverage at 10,000 feet by the NEXRAD doppler network. The existing certification standard (i.e., no degradation of weather services) would be retained. The bill would impose additional restrictions concerning the closing of or other operational changes to weather service offices located at airports. The Secretary must conduct an air safety appraisal and, as part of the certification process, include a finding that the action will not decrease aircraft safety. S. 916 would also establish new requirements for changes to a weather service office when such office is the sole office located in a State.

ADEQUACY OF EXISTING CERTIFICATION REQUIREMENT

The current certification requirement ensures the successful transition to a fully modernized NWS and makes additional restrictions unnecessary. To comply with existing law, the NWS is testing all operational capabilities of the planned modernization, including NEXRAD. For example, the NWS is operating a production NEXRAD at Norman, Oklahoma, in a test known as the "Norman Risk Reduction." NWS is also planning a demonstration of its modernized operations in an area containing ten weather offices located throughout Kansas, Oklahoma, and parts of Texas, Colorado,

and Missouri. This test is known as the Modernization and Associated Restructuring Demonstration (MARD). Results from the Norman Risk Reduction test will be available in 1992. The MARD will be completed in 1995. Consistent with the certification requirement of Public Law No. 100-685, the Department will seek no station closures until after the MARD is complete.

OBJECTIONS TO S. 98 AND S. 916

The Department opposes further restrictions which delay the planned modernization and associated restructuring of the NWS. Both S. 98 and S. 916 would increase significantly the time and cost of the modernization without improving the certification process or otherwise benefitting the public.

With respect to S. 98, the Department objects in particular to the provision that would prevent any closing or other changes for a period of at least one year after certification. This delay is estimated to increase the cost of the modernization by $30-$50 million and is unnecessary because Congress has adequate opportunities under existing law to review proposed changes to weather service offices.

The Department also opposes the requirement that the Secretary's certification be based on an independent NAS review. This provision is an unnecessary restriction on the Secretary's authority. Further, it could create a conflict of interest for the NAS. Currently, the NAS is required by contract with the National Oceanic and Atmospheric Administration to:

—review overall NWS planning and implementation;
—review test, demonstration, and certification plans;
—review the validity and effectiveness of methodologies for demonstrating an improvement in weather services; and
—review the validity of collection, analysis, and interpretation of data for demonstration and certification of such services.

The Department questions whether it is appropriate for the NAS to perform the reviews required by S. 98. The bill would make the NAS responsible for reviewing the effectiveness of various methodologies that it had a role in developing. Furthermore, the NAS' primary interest is assessing the overall scientific and technical validity of the modernization and certification process.

With respect to S. 916, the Department believes that the existing certification requirements will ensure that weather services provided to the Federal Aviation Administration will not be degraded by the NWS modernization. Similarly, the certification process requires full attention to the effects on in-state users should a state's sole office be closed.

The requirement of S. 916 for "complete and total" radar coverage at 10,000 feet is impractical, especially in mountainous terrain. The NEXRAD system will improve the present radar coverage and in no case will it create a gap in the current coverage. However, there will still be limited areas where gaps continue to exist due to the prohibitive cost of providing total coverage.

CONCLUSION

The NWS modernization and restructuring effort is the result of careful planning and has been endorsed by the scientific communi-

ty at large. Pursuant to the modernization plan, the NWS will advise Congress two years in advance of an NWS office closure or other significant change affecting staffing, services, or facilities.

The Department does not intend to close any NWS office prior to 1996. In the meantime, Congress will be receiving significant amounts of additional information regarding the modernization efforts. This will include the technical reports on the proven capabilities of the new technologies as they are deployed in an operational setting, as well as the results of the Norman Risk Reduction and MARD tests of the performance of the modernized weather office. If these test results do not satisfy Congressional concerns, there will be ample time to consider alternatives.

The Department believes that neither S. 98 nor S. 916 will achieve their intended goals but, in fact, will place an unnecessary and costly burden on the modernization program. For the above reasons, we strongly urge that these two bills not be considered favorably.

We have been advised by the Office of Management and Budget that there is no objection to the submission of this report to Congress, and that the enactment of legislation containing the substance of S. 98 or S. 916 would not be in accord with the program of the President.

Sincerely,

DAN HAENDEL,
Deputy General Counsel.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION MARINE FISHERIES PROGRAM AUTHORIZATION ACT

Section 2 of that Act

FISHERIES INFORMATION COLLECTION AND ANALYSIS

SEC. 2. (a) There are authorized to be appropriated to the Department of Commerce to enable the National Marine Fisheries Service to carry out its Fisheries Information Collection and Analysis duties under law [$26,500,000 for fiscal year 1984, $28,000,000 for fiscal year 1985, $27,382,000 for fiscal year 1986, $28,121,314 for fiscal year 1987, $28,915,392 for fiscal year 1988, and $29,764,234 for fiscal year 1989] *$52,843,000 for fiscal year 1992.* These moneys shall be used to fund those duties relating to fisheries information collection and analysis specified by the Fish and Wildlife Act of 1956 (16 U.S.C. 742a et seq.), the Act of May 11, 1938 (16 U.S.C. 755), and the Fur Seal Act of 1966 (16 U.S.C. 1151 et seq.), the Act entitled, "An Act to promote the conservation of wildlife, fish, and game, and for other purposes", approved March 10, 1934 (16 U.S.C. 661 et seq.), and any other law involving such duties. These duties

include, but are not limited to, collection analysis and dissemination of scientific data necessary to manage: marine fishery resources, marine mammals, endangered species, and their habitats.

(b) through (c) * * *

(d) Of the sums authorized under subsection (a) of this section, $1,000,000 for fiscal year 1992 are authorized to be appropriated for the purpose of developing dolphin-safe methods of locating and catching yellowfin tuna. Such authorization shall be in addition to moneys authorized under section 7 of the Act entitled "An Act to improve the operation of the Marine Mammal Protection Act of 1972, and for other purposes", approved October 9, 1981 (16 U.S.C. 1384). Within six months after the date of enactment of this subsection, the Secretary, in cooperation with the Inter-American Tropical Tuna Commission and after consultation with interested persons, shall publish a program plan for public comment that shall provide for—

(1) cooperative research to improve understanding of the behavioral association of dolphins and yellowfin tuna in the eastern tropical Pacific Ocean;

(2) development, testing, and implementation of new methods of locating and catching yellowfin tuna without the incidental taking of dolphins; and

(3) appropriate measures to ensure program participation and sharing of associated costs of each foreign government that conducts, or authorizes its nationals to conduct, yellowfin tuna fishing in the eastern tropical Pacific Ocean.

(e) Of the sums authorized under subsection (a) of this section, no more that $2,500,000 are authorized to be appropriated for fiscal year 1992 to enable the National Oceanic and Atmospheric Administration to establish the Chesapeake Bay Estuarine Resources Office under section 306 of the National Oceanic and Atmospheric Administration Authorization Act of 1991. No more than 20 percent of the amount appropriated under the authorization in this subsection shall be used for administrative purposes.

FISHERIES CONSERVATION AND MANAGEMENT OPERATIONS

SEC. 3. (a) There are authorized to be appropriated to the Department of Commerce to enable the National Marine Fisheries Service to carry out its fisheries conservation and management operations duties under law, [$35,000,000 for fiscal year 1984, $35,000,000 for fiscal year 1985, $25,933,000, for fiscal year 1986, $26,633,191 for fiscal year 1987, $27,385,248 for fiscal year 1988, and $28,189,171 for fiscal year 1989] *$27,869,000 for fiscal year 1992.* These moneys shall be used to fund those duties relating to fisheries conservation and management operations specified by the Fish and Wildlife Act of 1956 (16 U.S.C. 742a et seq.), the Act of May 11, 1938 (16 U.S.C. 755), the Fur Seal Act of 1966 (16 U.S.C. 1151 et seq.), and the Act entitled, "An Act to promote the conservation of wildlife, fish, and game, and for other purposes", approved March 10, 1934 (16 U.S.C. 661 et seq.), and any other law involving such duties. These duties include, but are not limited to, development, implementation, and enforcement of conservation and management measures to achieve continued optimum use of living marine resources, including hatch-

ery operations, fishery management plan activities, habitat conservation, and protected species management.

(b) through (c) * * *

Section 4 of that Act

FISHERIES STATE AND INDUSTRY ASSISTANCE PROGRAMS

SEC. 4. (a) There are authorized to be appropriated to the Department of Commerce to enable the National Marine Fisheries Service to carry out its fisheries State and industry assistance program duties under law, [$10,000,000 for fiscal year 1984, $12,000,000 for fiscal year 1985, $11,395,000 for fiscal year 1986, $11, 702,665 for fiscal year 1987, $12,033,120 for fiscal year 1988, and $12,386,365 for fiscal year 1989] *15,585,000 for fiscal year 1992.* These moneys shall be used to fund those duties specified by the Fish and Wildlife Act of 1956 (16 U.S.C. 742a et seq.) and any other law affecting State and industry fisheries assistance. These duties include, but are not limited to, financial assistance for fishing boats and fish processing plants, market development for fishery products, product quality and grants to States for improving management of interstate fisheries and stimulating fishery development.

(b) through (c) * * *

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

Section 304 of that Act

SEC. 304. Action by the Secretary.

(a) through (d) * * *

(e) FISHERIES RESEARCH.—*(1) The Secretary shall initiate and maintain, in cooperation with the Councils, a comprehensive program of fishery research to carry out and further the purposes, policy, and provisions of this Act. Such program shall be designed to acquire knowledge and information, including statistics, on fishery conservation and management and on the economics of the fisheries.*

[(1)] *(2)* Within one year after the date of enactment of the Fishery Conservation Amendments of 1990, and at least every three years thereafter, the Secretary shall develop and publish in the Federal Register a strategic plan for fisheries research for the five years immediately following such publication. The plan shall—

(A) identify and describe a comprehensive program with a limited number of priority objectives for research in each of the areas specified in paragraph [(2)]*(3)*;

(B) indicate the goals and timetables for the program described in subparagraph (A); and

(C) provide a role for affected commercial fishermen in such research, including involvement in field testing.

[(2)]*(3)* The areas of research referred to in paragraph [(1)] *(2)* are as follows:

(A) Research to support fishery conservation and management, including research on the economics of fisheries and biological research concerning the interdependence of fisheries or stocks of fish, the impact of pollution on fish populations, the

impact of wetland and estuarine degradation, and other matters upon the abundance and availability of fish.

(B) Conservation engineering research, including the study of fish behavior and the development and testing of new gear technology and fishing techniques to minimize the harvest of nontarget species and promote efficient harvest of target species.

(C) Information management research, including the development of a fishery information base and an information management system that will permit the full use of data in the support of effective fishery conservation and management.

[(3)] *(4)* In developing the plan required under paragraph [(1)] *(2)*, the Secretary shall consult with relevant Federal agencies, scientific and technical experts, and other interested persons, public and private, and shall publish a proposed plan in the Federal Register for the purpose of receiving public comment on the plan. The Secretary shall ensure that affected commercial fishermen are actively involved in the development of the portion of the plan pertaining to conservation engineering research. Upon final publication in the Federal Register, the plan shall be submitted by the Secretary to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Merchant Marine and Fisheries of the House of Representatives.

(f) through (g) * * *

MERCHANT MARINE ACT, 1936

Section 1101 of that Act

SEC. 1101. As used in this title—

(a) through (j) * * *

(k) The term "fishery facility" means—

(1) for operations on land—

(A) any structure of appurtenance thereto designed for the unloading and receiving from vessels, the processing, the holding pending processing, the distribution after processing, or the holding pending distribution, of fish from one or more fisheries,

(B) the land necessary for any such structure or appurtenance described in subparagraph (A), and

(C) equipment which is for use in connection with any such structure or appurtenance and which is necessary for the performance of any function referred to in subparagraph (A); [or]

(2) for operations other than on land, any vessel built in the United States used for, equipped to be used for, or of a type which is normally used for, the processing of fish; *or*

(3) for aquaculture, including operations on land or elsewhere—

(A) any structure or appurtenance thereto designed for aquaculture;

(B) the land necessary for any such structure or appurtenance described in subparagraph (A);

(C) equipment which is for use in connection with any such structure or appurtenance and which is necessary for the performance of any function referred to in subparagraph (A); and

(D) any vessel built in the United States used for, equipped to be used for, or of a type which is normally used for aquaculture;

but only if such structure, appurtenance, land, equipment, or vessel is owned by an individual who is a citizen or national of the United States or a citizen of the Northern Mariana Islands or by a corporation, partnership, association, or other entity that is a citizen of the United States within the meaning of section 2 of the Shipping Act, 1916 (46 U.S.C. 802), and for purposes of applying such section 2 with respect to this section—

(i) the term "State" as used therein includes any State, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands of the United States, Guam, the Northern Mariana Islands, or any other Commonwealth, territory, or possession of the United States; and

(ii) citizens of the United States must own not less than 75 percent of the interest in the entity and nationals of the United States or citizens of the Northern Mariana Islands shall be treated as citizens of the United States in meeting such ownership requirement;

(l) through (n) * * *

LAND REMOTE-SENSING COMMERCIALIZATION ACT OF 1984

Section 402 of that Act

CONDITIONS FOR OPERATION

SEC. 402. (a) * * *

(b) Any license issued pursuant to this title shall specify, at a minimum, that the licensee shall comply with all of the requirements of this Act and shall—

(1) operate the system in such manner as to preserve and promote the national security of the United States and to observe and implement the international obligations of the United States in accordance with section 607;

(2) make unenhanced data available to all potential users on a nondiscriminatory basis;

(3) upon termination of operations under the license, make disposition of any satellites in space in a manner satisfactory to the President;

(4) promptly make available all unenhanced data which the Secretary *of the Interior* may request pursuant to section 602;

(5) furnish the Secretary with complete orbit and data collection characteristics of the system, obtain advance approval of any intended deviation from such characteristics, and inform the Secretary immediately of any unintended deviation;

(6) notify the Secretary of any agreement the licensee intends to enter with a foreign nation, entity, or consortium involving foreign nations or entities;

(7) permit the inspection by the Secretary of the licensee's equipment, facilities, and financial records;

(8) surrender the license and terminate operations upon notification by the Secretary pursuant to section 403(a)(1); and

(9)(A) notify the Secretary of any "value added" activities (as defined by the Secretary by regulation) that will be conducted by the licensee or by a subsidiary or affiliate; and

(B) if such activities are to be conducted, provide the Secretary with a plan for compliance with the provisions of this Act concerning nondiscriminatory access.

Section 602 of that Act

ARCHIVING OF DATA

SEC. 602. (a) * * *

(b) The Secretary *of the Interior* shall provide for long-term storage, maintenance, and upgrading of a basic, global, land remote-sensing data set (hereinafter referred to as the "basic data set") and shall follow reasonable archival practices to assure proper storage and preservation of the basic data set and timely access for parties requesting data. The basic data set which the Secretary *of the Interior* assembles in the Government archive shall remain distinct from any inventory of data which a system operator may maintain for sales and for other purposes.

(c) In determining the initial content of, or in upgrading, the basic data set, the Secretary *of the Interior* shall—

(1) use as a baseline the data archived on the date of enactment of this Act [enacted July 17, 1984];

(2) take into account future technical and scientific developments and needs;

(3) consult with and seek the advice of users and producers of remote-sensing data and data products;

(4) consider the need for data which may be duplicative in terms of geographical coverage but which differ in terms of season, spectral bands, resolution, or other relevant factors;

(5) include, as the Secretary *of the Interior* considers appropriate, unenhanced data generated either by the Landsat system, pursuant to title III, or by licensees under title IV;

(6) include, as the Secretary *of the Interior* considers appropriate, data collected by foreign ground stations or by foreign remote-sensing space systems; and

(7) ensure that the content of the archive is developed in acordance with section 607.

(d) Subject to the availability of appropriations, the Secretary *of the Interior* shall request data needed for the basic data set and pay to the providing system operator reasonable costs for reproduction and transmission. A system operator shall promptly make requested data available in a form suitable for processing for archiving.

(e) Any system operator shall have the exclusive right to sell all data that the operator provides to the United States remote-sens-

ing data archive for a period to be determined by the Secretary *of the Interior* but not to exceed ten years from the date the data are sensed. In the case of data generated from the Landsat system prior to the implementation of the contract described in section 202(a), any contractor selected pursuant to section 202 shall have the exclusive right to market such data on behalf of the United States Government for the duration of such contract. A system operator may relinquish the exclusive right and consent to distribution from the archive before the period of exclusive right has expired by terminating the offer to sell particular data.

(f) After the expiration of such exclusive right to sell, or after relinquishment of such right, the data provided to the United States remote-sensing data archive shall be in the public domain and shall be made available to requesting parties by the Secretary *of the Interior* at prices reflecting reasonable costs of reproduction and transmittal.

(g) In carrying out the functions of this section, the Secretary *of the Interior* shall, to the extent practicable and as provided in advance by appropriation Acts, use existing Government facilities.

(h) In carrying out the functions of this section, the Secretary of the Interior shall consult with the Secretary to ensure that archiving activities are consistent with the terms and conditions of any contract or agreement entered into under title II, III, or V of this Act and with any license issued under title IV of this Act.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZATION ACT, FISCAL YEAR 1989

Section 408 of that Act

SEC. 408. (a) * * *

[(b) The Secretary may not close, consolidate, automate, or relocate any such office unless the Secretary has certified to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives that such action will not result in any degradation of weather services provided to the affected area. Such certification shall include—

[(1) a detailed comparison of the services provided to the affected area and the services to be provided after such action;

[(2) any recent or expected modernization of National Weather Service operations which will enhance services in the affected area; and

[(3) evidence, based upon operational demonstration of modernized National Weather Service operations, which supports the conclusion that no degradation in services will result from such action.]

(b)(1) The Secretary may not close, consolidate, automate, or relocate any such Office unless—

(A) the Secretary has certified to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives that such action will not result in any degradation of weather services provided to the affected area; and

(B) at least one year has elapsed following the date of such certification.

(2) The certification referred to in paragraph (1) shall be based upon an independent review by the National Academy of Sciences which shall include—

(A) a detailed comparison of the services provided to the affected area and the services to be provided after such action;

(B) any recent or expected modernization of National Weather Service operations which will enhance services in the affected area;

(C) an identification of any areas within any State which would be adversely affected by the loss of manned weather stations;

(D) an identification of any area within any State which would not receive complete and total coverage (at 10,000 feet) by the NEXRAD doppler network; and

(E) a statement of all evidence, based upon operational demonstration of modernized National Weather Service operations, which was considered in reaching the conclusion that no degradation in services will result from such action.

ACT OF AUGUST 30, 1964

First section of that Act

That the term "private corporations established under Federal law" as used in this Act means the following organizations:

(1) through (74) * * *

(75) NOAA Foundation.

ADDITIONAL VIEWS OF SENATOR KERRY

The National Oceanic and Atmospheric Administration (NOAA) is the Nation's lead civilian oceanic and atmospheric agency. As such, NOAA is responsible for a number of diverse and important Federal activities—from monitoring the Antarctic ozone hole to regulating fishing off the Massachusetts coastline.

In S. 1405, the Committee has worked to create a comprehensive NOAA authorization bill that covers the full range of agency responsibilities and addresses a number of key policy issues. Thus, it is important that this legislation be enacted promptly. During the Committee's consideration of S. 1405, I had serious reservations about accepting the amendment offered by Senator Pressler with respect to weather station closures. I do not disagree with the intent of the amendment, but I believe that it goes beyond what is necessary to ensure public safety and that its inclusion jeopardizes the chances of completing a NOAA authorization bill this session.

As I understand it, this provision is intended to assure that communities will not find themselves faced with a reduction in weather coverage as a result of ongoing efforts to modernize the National Weather Service. Let me start by saying that I completely agree as to the importance of maintaining current weather services. Our public weather warning and forecast system is essential for safeguarding the lives and property of Americans across the Nation.

I also recognize the importance of keeping local weather stations open until new weather radars and observing systems are fully operational and until communities have had adequate time to assess the effects of modernization on the weather services they receive. At the same time, however, I would contend that the Committee has already taken steps to deal with this concern. Under existing law, before the Secretary of Commerce can close or automate a weather station, the Secretary must certify that there will be no degradation in weather services to the affected area. The Committee has also included a provision in S. 1405 that prohibits the Secretary from closing any weather service office before 1996. This should provide more than enough time to ensure that the new weather systems are working. So we do have a safety net in place and adequate time to evaluate station closings.

I also would like to point out that Senator Pressler's proposal for dealing with the closing issue creates problems of its own. The amendment would require that any change in weather station operations be delayed for at least 1 year after the Secretary has completed the certification called for under current law. The proposed delay has raised strong objections from the Department of Commerce and given rise to veto threats. Senator Pressler offered this same amendment to last Congress' NOAA authorization bill, and its inclusion was considered one of the primary reasons that the bill was not enacted. The Administration's primary objection is

that the delay in closing weather stations would require them to maintain duplicate facilities at an estimated cost of $30 to $50 million.

In addition to the Administration concerns, the amendment creates problems for the National Academy of Sciences and the National Research Council. Dr. Bob White of the National Research Council emphatically states that the provision is unworkable. It calls for his organization and the National Academy of Sciences to review the operations of each weather office slated for closure under the modernization program. As Dr. White explains in the attached letter, this requirement far exceeds the capacity of the Council and the Academy to implement it. As the current Council Vice Chairman and the former head of the National Weather Service, Dr. White seems uniquely qualified to judge both the magnitude of the effort required and the capability of his current organization to mount such an effort. Furthermore, I question whether we really want to place such an uncomfortable burden on the Nation's preeminent scientists.

Let me again reiterate that I agree with the need for the Committee and the Congress to take all necessary steps to maintain the National Weather Service's coverage and effectiveness during the modernization process. However, I do not believe this amendment accomplishes that purpose. I look forward to working with him on an alternative solution that would be cost effective, ensure public safety, and allow us to pass an authorization bill.

JOHN F. KERRY.

NATIONAL RESEARCH COUNCIL,
OFFICE OF THE VICE CHAIRMAN,
Washington, DC, September 10, 1991.

Hon. ERNEST F. HOLLINGS, *Chairman,*
Hon. JOHN F. KERRY, *Vice Chairman,*
National Ocean Policy Study,
Committee on Commerce, Science, and Transportation, Washington, DC.

DEAR SENATOR HOLLINGS AND SENATOR KERRY: We have reviewed Senator Pressler's amendment to S. 1405, the NOAA Authorization Act of 1991, calling upon the National Academy of Sciences to make an independent review of each National Weather Service station certification action proposed by the Secretary of Commerce in accordance with Public Law 100-685. I would like to explain why it is not possible for us to undertake the task as specified.

When asked to advise the federal government, the National Research Council, the operating arm of the Academies of Sciences and Engineering, typically convenes an expert panel of unpaid volunteers. They meet intermittently, but rarely more than four times a year, over an eighteen-month or two-year period to deliberate and produce a report. This mode does not lend itself to the kind of detailed site-by-site examination and certification review envisioned by the amendment. In our judgment, to review thoroughly the number of NWS offices involved would require virtually a full-time effort. It would tax a volunteer committee, most of whose

members have other full-time commitments, far beyond its capacity.

As you know, our Committee on National Weather Service Modernization, chaired by Charles Hosler, is currently studying various generic issues related to the modernization program, including National Weather Service plans for the certification process and the design of the Modernization and Associated Restructuring Demonstration (MARD). The committee could, if requested by the Department of Commerce, extend its work to address other broad procedural issues of concern to Congress. In any case, this committee's further findings and recommendations on the generic certification process will be made available to you as soon as their report is completed.

If you have any further questions about our work in this area, please have your staff contact David Johnson at 334-2856 or Stephen Merrill at 334-2200.

Sincerely,

ROBERT M. WHITE,
Vice Chairman.

ADDITIONAL VIEWS OF SENATOR DANFORTH

There is a provision in S. 1405 which I strongly oppose: the Buy America provision concerning NOAA's procurement of vessels. Our trading partners would consider this provision to be inconsistent with the international obligations of the United States under the General Agreement on Tariffs and Trade (GATT) Government Procurement Code. Enacting legislation which violates our international obligations will only prompt similar action by our trading partners.

The Buy America provisions on vessels and the repair and maintenance of vessels would also be detrimental to two sets of ongoing negotiations designed to increase export opportunities for U.S. suppliers.

First, the United States is negotiating an expansion of the GATT Government Procurement Code to new areas of procurement, such as foreign telecommunications and power generation equipment purchases, and other areas in which American firms are most competitive. As part of these negotiations, the U.S. negotiators seek to expand the code to cover services contracts such as repair and maintenance service contracts. The Buy America provisions of S. 1405 are inconsistent with this negotiating position. Senate approval of such provisions would come at a particularly sensitive time in the negotiations, since signatories to the Government Procurement Code have just reached a consensus to conclude the negotiations by the end of the year.

Second; in 1989, the United States initiated negotiations in the Organization for Economic Cooperation and Development (OECD) intended to eliminate shipbuilding and repair subsidies provided by Japan, Korea, the European Community, and several other foreign countries. Completion of this agreement would remove foreign subsidies and other barriers to trade for U.S. shipbuilders. The Buy America provisions in S. 1405 on both the procurement of ships and the repair and maintenance of ships would undermine our efforts to conclude this agreement and to expand trade in this area.

These provisions are counterproductive to U.S. trade goals. The Senate should strike these provisions.

JOHN C. DANFORTH.

ADDITIONAL VIEWS OF SENATOR PRESSLER

The modernization of the National Weather Service directly affects the livelihood of all Americans. For this reason, I offered an amendment to this legislation to require an independent certification that "modernization" of the Weather Service does not adversely affect the performance or quality of the forecasting and warning capability of the National Weather Service. This amendment is identical to S. 98, the National Weather Service Modernization Act, which I introduced earlier in the year.

On June 18, 1991 a hearing on S. 98 was held in the Commerce, Science, and Transportation Committee. At this hearing, the National Weather Service Employees Organization (NWSEO) testified in support of S. 98. NWSEO Vice President Neal Marchbanks testified that if S. 98 were enacted into law, it would guarantee that existing weather warning services would not be degraded through "modernization." Officials from the National Oceanic and Atmospheric Administration (NOAA) voiced concern over the cost of keeping weather service offices open for an additional year.

By adopting my amendment, the Committee recognizes that the existing National Weather Service Modernization Plan needs safeguards. Currently, the National Weather Service is implementing a plan to replace its existing radar system with a new radar system called Nexrad (for "next generation radar").

Under the proposed modernization plan, many States are in danger of losing vital weather service stations. The loss of these weather stations could create weather-related safety problems for aviation and the people who live in the areas covered by the stations.

Public Law 100–685, signed by the President in November 1988, established certain conditions on the planning, reporting, and accomplishment of the modernization and associated restructuring of the National Weather Service. To ensure that there would be no degradation in service during the transition to the modernized and restructured National Weather Service, Public Law 100–685 further imposed a requirement that the Secretary of Commerce certify that there is no degradation of service. In this Public Law, Congress failed to define what this certification should be based upon. My amendment corrects that deficiency.

Since enactment of Public Law 100–685, the Department of Commerce already has stated its plan to close over 130 weather offices, even though the required certification has not yet been made. It has become clear that the Department of Commerce is intent on closing these offices, making self-certification by the Department inevitable. My amendment better defines this certification process, and brings a more objective referee into the process.

This amendment is necessary to ensure that any decision to close existing weather service offices will not affect the overall forecast-

ing capability of the National Weather Service (NWS). This amendment ensures a safe modernization program by having the National Academy of Sciences (NAS) determine on a case-by-case basis whether a weather station closing would result in "degradation of services."

In particular, this amendment ensures a safe modernization program by examining on a case-by-case basis the effects of new technologies and the deletion of manpower through automation. These changes should not be allowed to adversely affect such an essential public service. By providing for an independent report, my amendment guarantees that no "degradation in services" would occur.

The amendment further ensures that States with weather office closings could voice their concerns to an independent group and, if necessary, to Congress. Modernization can be safely accomplished only through a case-by-case review of each proposed station closure.

My concern with the proposed Weather Service modernization plan arise from the effect of the modernization plan on my home State of South Dakota. Under the modernization plan, the Weather Service proposes to close down a vital weather service station at Huron, SD. Based on information supplied by the National Weather Service, the proposed NEXRAD doppler radar coverage for South Dakota would not be capable of providing adequate coverage for an area in the central part of the State. Perhaps more importantly, loss of trained professionals who can deal with citizens on site clearly would produce a "degradation in services." Yet the Weather Service is planning to close the Huron Weather Service Office. Closing this station would create serious weather-related safety problems for aviators and the people who live in the affected area.

Many other States are affected similarly. The NAS independent review process would ensure that people who live in areas affected by a weather station closure could voice their concerns to NSA and, if necessary, to Congress. This independent review process would also ensure that before we give machines all the responsibility for weather prediction and warning, we thoroughly examine the instances in which human beings are still needed to perform these tasks.

○